

CHAPTER 4

POINT AND NONPOINT SOURCE CHARACTERIZATION OF THE BARREN RIVER WATERSHED

4.1 Background.

4.2. Characterization of HUC-10 Subwatersheds

4.2.A. 0511000201 (West Fork)

4.2.B. 0511000204 (Barren River)

4.2.C. 0511000205 (Salt Lick Creek)

4.2.D. 0511000208 (Trammal Creek)

4.2.E. 0511000209 (Middle Fork)

4.1. BACKGROUND. This chapter is organized by HUC-12 subwatershed, and the description of each subwatershed is divided into four parts:

- i. General description of the subwatershed
- ii. Description of point source contributions
 - ii.a. Description of facilities discharging to water bodies listed on the 2004 303(d) list
- iii. Description of nonpoint source contributions

The Tennessee portion of the Barren River Watershed (HUC 05110002) has been delineated into five HUC 10 (10-digit) subwatersheds, each of which is composed of one or more HUC-12 subwatersheds.

Information for this chapter was obtained from databases maintained by the Division of Water Pollution Control or provided in the WCS (Watershed Characterization System) data set. The WCS used was version 2.0 (developed by Tetra Tech, Inc for EPA Region 4) released in 2003.

WCS integrates with ArcView® v3.x and Spatial Analyst® v1.1 to analyze user-delineated (sub)watersheds based on hydrologically connected water bodies. Reports are generated by integrating WCS with Microsoft® Word. Land Use/Land Cover information from 1992 MRLC (Multi-Resolution Land Cover) data are calculated based on the proportion of county-based land use/land cover in user-delineated (sub)watersheds. Nonpoint source data in WCS are based on agricultural census data collected 1992–1998; nonpoint source data were reviewed by Tennessee NRCS staff.

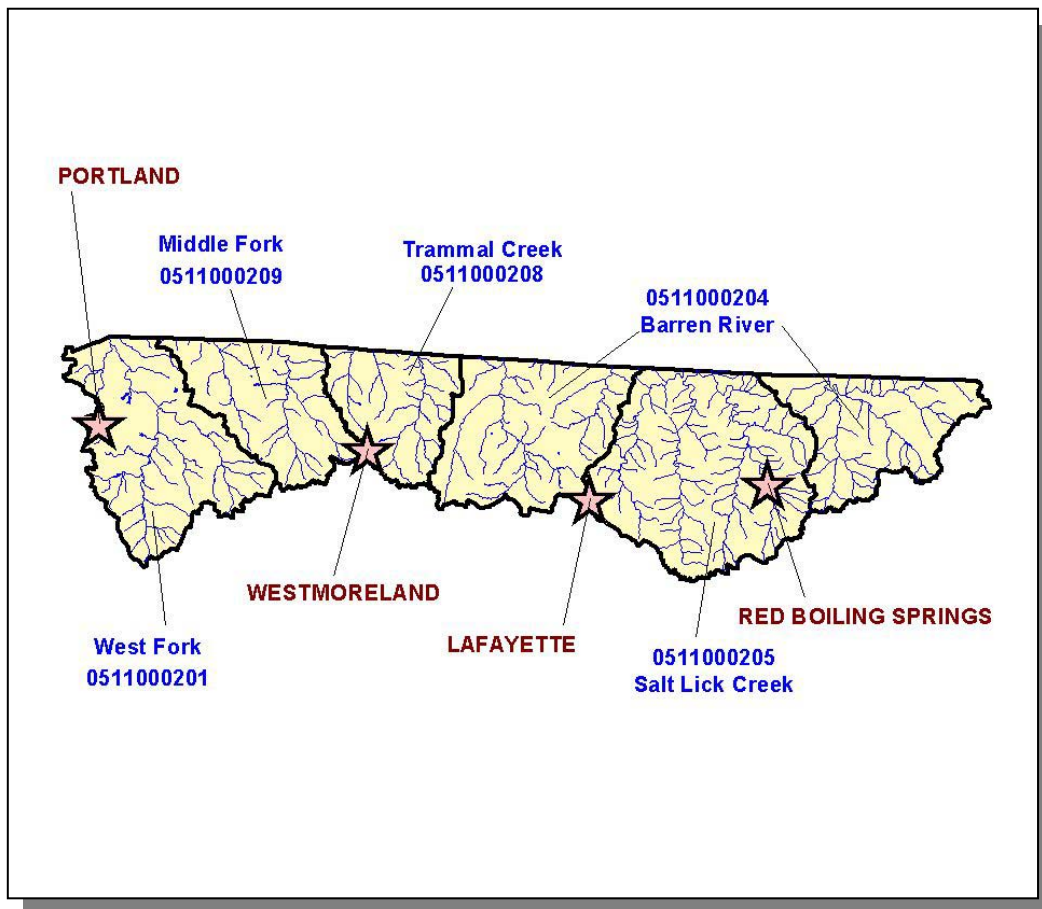


Figure 4-1. The Tennessee Portion of the Barren River Watershed is Composed of Five USGS-Delineated Subwatersheds (10-Digit Subwatersheds). Locations of Lafayette, Portland, Red Boiling Springs, and Westmoreland are shown for reference.

4.2. CHARACTERIZATION OF HUC-10 SUBWATERSHEDS. The Watershed Characterization System (WCS) software and data sets provided by EPA Region IV were used to characterize each subwatershed in the Tennessee portion of the Barren River Watershed.

HUC-10	HUC-12
0511000201	051100020101 (Upper West Fork)
	051100020102 (Lower West Fork)
0511000204	051100020403 (Treeline Creek)
	051100020404 (Barren River)
	051100020405 (Puncheon Creek)
	051100020406 (Pinchgut Creek)
	051100020407 (Long Hungry Creek)
	051100020408 (Long Creek)
0511000205	051100020501 (Salt Lick Creek)
	051100020502 (Long Fork)
0511000208	051100020801 (Trammel Creek)
	051100020802 (Little Trammel Creek)
0511000209	051100020901 (Middle Fork)
	051100020902 (Sulfur Fork)

Table 4-1. HUC-12 Drainage Areas are Nested Within HUC-10 Drainages. NRCS worked with USGS to delineate the HUC-10 and HUC-12 drainage boundaries.